

IN THE DRAWINGS

The attached sheet of drawings includes changes to Figs. 1A and 1B. This sheet, which includes Figs. 1A and 1B, replaces the original sheet including Figs. 1A and 1B.

Attachment: Replacement Sheets

REMARKS/ARGUMENTS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-13 are currently pending in the application. Claims 1, 2, 4 and 9 are amended by the present amendment. Support for amended Claims 2 and 9 can be found in the original specification, claims and drawings.¹ No new matter is presented.

In the outstanding Official Action, the drawings were objected to because of a minor informality; Claims 1-4 and 9 were rejected under 35 U.S.C. § 103(a) as unpatentable over Applicants' background art in view of Tsunehara et al. (U.S. Patent No. 6,907,260, hereinafter "Tsunehara"); Claim 5 was rejected under 35 U.S.C. § 103 as unpatentable over Applicants' background art in view of Tsunehara in further view of Komatsu (U.S. Patent Pub. 2001/0023188, hereinafter "Komatsu"); Claim 10 was rejected under 35 U.S.C. § 102(e) as anticipated by Tsunehara; and Claims 6-8 and 11-13 were objected to as dependent upon a rejected base claim but would be allowable if rewritten in independent form including all limitations of the base claim and any intervening claims.

Applicants appreciatively acknowledge the indication of allowable subject matter. However, since Applicants consider that independent Claims 4 and 10 patentably define over the applied references, the remaining dependent claims are presently maintained in dependent form.

Figs. 1A and 1B were objected to as not being designated by a legend indicating that these figures show background art. In response, Figs. 1A and 1B are amended to include the legend "Background Art" as requested in the Official Action.

Accordingly, Applicants respectfully request that the objection to Figs. 1A and 1B be withdrawn.

¹E.g., specification, original Claims 1, 3 and 4.

Regarding the rejection of Claims 1-4 and 9 under 35 U.S.C. § 103(a) as unpatentable over Applicants' background art in view of Tsunehara, Applicants respectfully submit that independent Claims 1, 3 and 4, and amended independent Claims 2 and 9 recite novel features clearly not taught or rendered obvious by the applied references.

Independent Claim 1 relates to a transmission power control method for controlling the transmission power of packet signals transmitted from a mobile station via an upstream radio channel in a radio communication system for allowing radio communications between base stations and a plurality of mobile stations. Independent Claim 1 recites that the method comprises the steps of:

measuring the traffic volume of the packet signals in the base station; and
switching between a first control method and a second control method based on the measured traffic volume in the base station...

Independent Claims 3 and 4, and amended independent Claims 2 and 9, while directed to alternative embodiments, recite substantially similar features as those noted above in independent Claim 1. Accordingly, the remarks and arguments presented below are applicable to each of amended independent Claims 1-4 and 9.

With regard to Claim 1, the Official Action cites Applicants' background art as disclosing the claimed invention with the exception of "measuring the traffic volume of the packet signals in the base station" and "switching between a first control method and a second control method based on the measured traffic volume in the base station."² The Official Action cites Tsunehara as disclosing this claimed feature and states that it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the cited art to arrive at Applicants' claims. Applicants respectfully traverse this

² Outstanding Official Action, p. 3.

assertion as Tsunehara fails to teach or suggest the claimed features for which it is asserted as a secondary reference under 35 U.S.C. § 103.

Tsunehara describes a transmission power controlling method for reducing an influence of incorrect control in a mobile communication system.³ Tsunehara, however, fails to teach or suggest “measuring the traffic volume of the packet signals in the base station” and “switching between *a first control method and a second control method based on the measured traffic volume in the base station*,” as recited in independent Claim 1.

In addressing the feature of Claim 1 directed to “switching between a first control method and a second control method based on the measured traffic volume” the Official Action cites col. 2, lines 15-19 and col. 2, lines 34-42 of Tsunehara. These cited portions of Tsunehara describe that the upstream channel transmit power controlling signal generating portion (222) compares SIRa to SIRn with target SIRs given for each mobile station in advance by a controlling portion (500) to generate transmit power controlling signals for each mobile station. As shown in Fig. 31, a measured SIR corresponding to each mobile station is compared to a threshold SIR and an output is generated that instructs a mobile station to increase or reduce transmit power. Thus, the cited portion of Tsunehara simply describes measuring an SIR corresponding to a signal received from a single mobile station and comparing the SIR to a threshold SIR in order to instruct the mobile station to increase or decrease transmission power (e.g., by way of adjusting a TPC command) accordingly.

In contrast, independent Claim 1 recites “switching between *a first control method and a second control method based on the measured traffic volume in the base station*.” Tsunehara clearly does not switch between a first control method and a second control method, whatsoever, but instead simply measures an SIR received from a single mobile station, compares to a threshold SIR and instructs the mobile station whether or not to

³ Tsunehara, Abstract.

increase or decrease transmission power (e.g., performs a single method of inner loop power control). This is clearly not switching a first *control method* and a second *control method*, as recited in independent Claim 1.

Therefore, Applicants' background art and Tsunehara, neither alone, nor in combination teach or suggest "measuring *the traffic volume* of the packet signals and the base station" and "*switching between a first control method and a second control method based on the measured traffic volume in the base station*" as recited in independent Claim 1.

Accordingly, Applicants respectfully request that the rejection of Claim 1 under 35 U.S.C. § 103 be withdrawn. For substantially similar reasons, it is also submitted that independent Claims 3 and 4, and amended independent Claims 2 and 9 (and the claims that depend therefrom) patentably define over Applicants' background material and Tsunehara.

With regard to the rejection of Claim 5 under 35 U.S.C. § 103(a) as unpatentable over Applicants' background material in view of Tsunehara and Komatsu, it is noted that Claim 5 depends from independent Claim 4, and is believed to be patentable for at least the reasons discussed above. Further, it is respectfully submitted that Komatsu fails to remedy any of the above-noted deficiencies of Tsunehara and Applicants' background material.

Regarding the rejection of Claim 10 under 35 U.S.C. § 102(e) as anticipated by Tsunehara, Applicants respectfully submit that independent Claim 10 recites novel features clearly not taught or rendered obvious by the applied references.

Independent Claim 10 is directed to a mobile station for communicating with the base station similar to that recited in independent Claim 1 via code division multiple access (CDMA) radio channels. The mobile station includes:

... an extractor configured to extract the traffic volume of packet signals transmitted via upstream radio channels and a control method of the transmission power of the packet signals selected in the base station, from the notification signal; and
a transmission judger configured to judge *whether or not to transmit the packet signals, based on the received*

power of the notification signals, the traffic volume of the packet signals and the control method of the transmission power of the packet signals.

As disclosed in an exemplary embodiment at Fig. 7 and p. 23, line 24 – p. 26, line 28 of the specification, a mobile station extracts the traffic volume of packet signals transmitted via upstream radio channels and a control method of the transmission power of the packet signal selected by the base stations and determines whether, and under what circumstances, a packet may be transmitted from the mobile station to the base station.

As an initial matter, Applicants note that the arguments presented above with respect to independent Claim 1 are also applicable to independent Claim 10 with regard to the recitations of extracting “the traffic volume of packet signals transmitted via upstream radio channels and a control method of the transmission power of the packet signals selected in the base station” as Tsunehara fails to teach or suggest measuring a traffic volume or selecting a control method.

Further, with regard to the “transmission judger” feature, the Official Action relies on col. 3, lines 30-37 of Tsunehara. This cited portion of Tsunehara describes the transmit power calculating portion (19) determines a change in transmission power using a variation amount of the transmit power input from a selector and a current transmit power input from a transmit power maintaining circuit (20). Thus, the cited portion of Tsunehara simply describes calculating a changed transmission power using the variation amount of the transmit power input from the selector and the current transmission power input from a transmit power maintaining circuit to adjust the transmission power of the mobile station.

Thus, not only does Tsunehara fail to teach or suggest that the mobile station extracts a traffic volume of signals transmitted upstream to the base station and extracts the control method of the transmission power of the packet signals selected in the base station, but also fails to teach or suggest that the mobile station judges whether or not to transmit the packet

signals based on the received and extracted information. Specifically, the cited portion of Tsunehara simply describes a method for calculating a new transmission power value for the mobile station, and it is assumed that when the mobile station receives an indication as to the updated power setting it modifies transmission power and transmits data accordingly. At no point does Tsunehara teach or suggest that the mobile station judges “whether or not to transmit packet signals, based on the received power of the notification signal, the traffic volume of the packet signal and the control method of the transmission power of the packet signals,” as recited in independent Claim 10. Specifically, Tsunehara fails to teach or suggest that the mobile station judges whether or not to transmit packet signals based on any parameters, whatsoever.

Accordingly, for at least the reasons discussed above, Applicants respectfully request that the rejection of Claim 10 (and Claims 11-13, which depend therefrom) under 35 U.S.C. § 102(e) be withdrawn.

Consequently, in view of the present amendment and in light of the foregoing comments, it is respectfully submitted that the invention defined by Claims 1, 3-8, and 10-13 is patentably distinguishing over the applied references. The present application is therefore believed to be in condition for formal allowance and an early and favorable reconsideration of the application is therefore requested.

Respectfully submitted,

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